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Occupational Exposure to Bloodborne Pathogens



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Introduction

Acquired Immunodeficiency Syndrome (AIDS) and Hepatitis B merit serious concern for workers occupationally exposed to blood, other potentially infectious materials, and certain other body fluids that contain bloodborne pathogens such as the human immunodeficiency virus (HIV), and the Hepatitis B virus (HBV). According to Occupational Safety and Health Administration (OSHA) estimates, more than 5.6 million workers in health care and public safety occupations could be potentially exposed to these viruses.*

These workers include, but are not limited to, physicians, dentists, dental employees, phlebotomists, nurses, morticians, paramedics, medical examiners, laboratory and blood bank technologists and technicians, housekeeping personnel, laundry workers, employees in long-term care facilities, and home care workers. Other workers who may be occupationally exposed to blood or other potentially infectious materials, depending on their work assignments, include research laboratory workers, and public safety personnel (fire, police, rescue, correctional officers, etc.).

Exposure to bloodborne pathogens may occur in many ways. Although needlestick injuries are the most common means of exposure for health care workers, bloodborne pathogens also can be transmitted through contact with the mucous membranes and non-intact skin of workers.

OSHA recognizes the need for a regulation that prescribes safeguards to protect workers against the health hazards related to bloodborne pathogens. Thus, with the full implementation of its standard, OSHA aims to reduce the risk of occupational exposure to bloodborne diseases.

This standard, Part 1910.1030 of Title 29 of the *Code of Federal Regulations*, was published in the *Federal Register* on December 6, 1991, (29 CFR 1910.1030) and becomes effective on March 6, 1992 (see Table 1 for compliance calendar).

*OSHA, Office of Regulatory Analysis, 1991.

Table 1. Compliance Calendar

Effective Date of the Standard	3/6/92
Exposure Control Plan	5/5/92
Information and Training of Employee Hazard Communication	6/4/92
Recordkeeping	6/4/92
Engineering/Work Practices	7/6/92
Personnel Protective Equipment	7/6/92
Hepatitis B Vaccination and Post-Exposure Followup	7/6/92
Labels and Signs	7/6/92
Housekeeping	7/6/92
Other Provisions	7/6/92

Federal OSHA authority extends to all private sector employers with one or more employees, as well as federal civilian employers. States administering their own occupational safety and health programs through plans approved under section 18(b) of the Occupational Safety and Health (OSH) Act of 1970 must adopt standards and enforce requirements that are at least as effective as federal requirements. Of the 25 current state plan states and territories, 23 cover the private and public (i.e., state and local governments) sectors, and 2 cover the public sector only (see listing at the end of this booklet).

This booklet provides an overview of OSHA's bloodborne pathogens standard and informs employees and employers of the risks of occupational exposure to bloodborne pathogens and how to reduce these risks. This booklet is not intended to be used as a substitute for the standard's requirements or for those of the OSH Act. Please refer to the standard (*Title 29 Code of Federal Regulations, Part 1910.1030*) for the complete text.

Who Is Covered?

OSHA's rule applies to all persons occupationally exposed* to blood or other potentially infectious materials. Blood means human blood, blood products or blood components. Other potentially infectious materials include the following: (1) human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids; (2) any unfixed tissue or organ (other than intact skin) from a human (living or dead); and (3) HIV-containing cell or tissue cultures, organ cultures, and HIV or HBV-containing culture medium or other solutions as well as blood, organs, or other tissues from experimental animals infected with HIV or HBV.

The bloodborne pathogens standard identifies how to determine who has occupational exposure and how to reduce workplace exposure to

*Occupational exposure means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of the employees duties.

bloodborne pathogens. Preventive measures and other requirements of the standard are described in the following paragraphs.

Exposure Control Plan

The standard requires the employer to develop a written exposure control plan. At a minimum, the exposure control plan must include (1) the exposure determination, (2) the procedures for evaluating the circumstances surrounding an exposure incident, and (3) the schedule and method for implementing sections of the standard covering the methods of compliance, HIV and HBV research laboratories and production facilities, hepatitis B vaccination and post-exposure followup, communication of hazards to employees, and recordkeeping. The schedule of how and when the provisions of the standard will be implemented may be as simple as a calendar with brief notations describing the methods of implementation, and an annotated copy of the standard.

The plan must be reviewed, updated at least annually or whenever new tasks and procedures affect occupational exposure, made accessible to employees (in accordance with *Title 29 Code of Federal Regulations*, Part 1910.20(e), *Access to Employee Exposure and Medical Records*) and made available to the Assistant Secretary for OSHA and to the Director of the National Institute for Occupational Safety and Health (NIOSH) for examination and copying.

Who Has Occupational Exposure?

The exposure determination must be based on the definition of occupational exposure **without regard to personal protective clothing and equipment**. The exposure determination is made by reviewing job classifications within the work environment, and listing exposures into two groups. The first group includes job classifications in which all of the employees have occupational exposure, such as operating room scrub nurses. Where *all* employees have occupational exposure, it is not necessary to list specific work tasks. The second group includes those classifications in which *some* of the employees have occupational exposure.

Where only some employees have occupational exposure, specific tasks and procedures causing occupational exposure must be listed. An example would be in a hospital's laundry where some of the workers might be assigned the task of handling contaminated laundry while others would not. When employees with occupational exposure have been identified, the next step is to communicate the hazards to these employees.

Communicating Hazards to Employees

By June 4, 1992, each occupationally exposed employee must be given information and training. Information and training must be provided at no cost to the employee, at the time of initial assignment, during working hours, and at least once a year thereafter. Additional training is needed when existing tasks are modified or new tasks that involve occupational exposure to bloodborne pathogens affect the employee's exposure. Persons conducting training must be knowledgeable about the subject matter, and the information provided must be appropriate in content and vocabulary to the educational level, literacy, and language of the audience, and must contain the following elements:

- How to obtain a copy of the regulatory text and an explanation of its contents;
- Information on the epidemiology and symptoms of bloodborne diseases;
- Ways in which bloodborne pathogens are transmitted;
- Explanation of the exposure control plan and how to obtain a copy;
- Information on how to recognize tasks that might result in occupational exposure;
- Explanation of the use and limitations of work practice and engineering controls, and personal protective equipment;
- Information on the types, selection, proper use, location, removal, handling, decontamination, and disposal of personal protective equipment;

- Information on hepatitis B vaccination such as safety, benefits, efficacy, methods of administration, and availability;
- Information on who to contact and what to do in an emergency;
- Information on how to report an exposure incident and on the post-exposure evaluation and followup;
- Information on warning labels, and signs, where applicable, and color-coding; and
- Question and answer session on any aspect of the training.

Additional training in standard microbiological practices and techniques, practices and operations specific to the facility, and the proper handling of human pathogens or tissue cultures is required for employees who work in HIV and HBV laboratories and production facilities. This additional training must be given before beginning initial work assignments.

Preventive Measures

Hepatitis B Vaccination

The employer must make the hepatitis B vaccine and vaccination series available to all employees who have occupational exposure as well as provide a post-exposure evaluation and followup to all employees who experience an exposure incident. The vaccine and vaccinations, as well as all medical evaluations and followup must be made available at no cost to the employee, provided at a reasonable time and place, and performed by or under the supervision of a licensed physician or another licensed health care professional whose scope of practice allows him or her to independently perform activities required by paragraph (f) of the standard (such as a nurse practitioner). Vaccinations also must be administered according to current recommendations of the U.S. Public Health Service. Employees who decline the vaccination must sign a declination form (see Appendix A). The employee may request and obtain the vaccination at a later date and at no cost, if he/she continues to be exposed.

The hepatitis B vaccine and vaccination series must be offered within 10 working days of initial assignment to employees who have occupational exposure to blood or other potentially infectious materials unless (1) the employee has previously received the complete hepatitis B vaccination series, (2) antibody testing reveals that the employee is immune, or (3) medical reasons prevent taking the vaccinations. Prescreening is not required before receiving the hepatitis B vaccination series.

The employer must obtain and provide the employee with a copy of the health care professional's written opinion stating whether a hepatitis B vaccination is indicated for the employee and whether the employee has received such vaccination.

Any booster doses of the hepatitis B vaccine recommended by the U.S. Public Health Service also must be provided.

Universal Precautions

Universal precautions must be observed. This method of infection control requires the employer and employee to assume that **all** human blood and specified human body fluids are infectious for HIV, HBV, and other bloodborne pathogens. Where differentiation of types of body fluids is difficult or impossible, **all** body fluids are to be considered as **potentially infectious**.

Methods of Control

Engineering and Work Practice Controls

Engineering and work practice controls are the primary methods used to prevent occupational transmission of HBV and HIV. Personal protective clothing and equipment also are necessary when occupational exposure to bloodborne pathogens remains even after instituting these controls.

Engineering controls reduce employee exposure in the workplace by either removing or isolating the hazard or isolating the worker from exposure. Self-sheathing needles, puncture-resistant disposal containers for contaminated sharp instruments, resuscitation bags,

and ventilation devices are examples of engineering controls. Engineering controls must be examined and maintained or replaced on a scheduled basis.

Proper **work practice controls** alter the manner in which a task is performed. In work areas where a reasonable likelihood of occupational exposure exists, work practice controls include restricting eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses; prohibiting mouth pipetting; preventing the storage of food and/or drink in refrigerators or other locations where blood or other potentially infectious materials are kept; providing and requiring the use of handwashing facilities; and routinely checking equipment and decontaminating it prior to servicing and shipping. Other work practice requirements include, but are not limited to, the following:

- Washing hands when gloves are removed and as soon as possible after skin contact with blood or other potentially infectious materials occurs.
- Recapping, removing or bending needles is prohibited unless the employer can demonstrate that no alternative is feasible or that such action is required by a specific medical procedure. When recapping, bending or removing contaminated needles is required by a medical procedure, this must be done by mechanical means, such as the use of forceps, or a one-handed technique.
- Shearing or breaking contaminated needles is not permitted.

Personal Protective Equipment

Personal protective equipment also must be used if occupational exposure remains after instituting engineering and work practice controls, or if those controls are not feasible.

The use of **personal protective equipment** helps prevent occupational exposure to infectious materials. Such equipment includes, but is not limited to, gloves, gowns, laboratory coats, face shields or masks, and eye protection. Personal protective equipment is considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach employees'

work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

Under the standard, employers must provide, make accessible, and require the use of personal protective equipment at no cost to the employee. Personal protective equipment also must be provided in appropriate sizes. Hypoallergenic gloves or other similar alternatives must be made available to employees who have an allergic sensitivity to gloves. Employers also must ensure that protective equipment is properly used, cleaned, laundered, repaired or replaced, as needed, or discarded.

An employee may temporarily and briefly decline wearing personal protective equipment under rare and extraordinary circumstances and when, in the employee's professional judgment, it prevents the delivery of health care or public safety services or poses an increased hazard to workers. These circumstances would be expected to be life threatening. In general, appropriate personal protective equipment is expected to be used whenever occupational exposure may occur.

The employer also must ensure that employees observe the following precautions for safely handling and using personal protective equipment:

- Remove protective equipment before leaving the work area and after a garment becomes contaminated.
- Place used protective equipment in appropriately designated areas or containers when being stored, washed, decontaminated, or discarded.
- Wear appropriate gloves when it can be reasonably anticipated that the employee may have contact with blood, other potentially infectious materials; when performing vascular access procedures,* and when handling or touching contaminated items or surfaces. Replace gloves if

*Some exceptions are made for voluntary blood donation centers. See Section (d)(3)(ix)(D) of the Bloodborne Pathogens Standard for clarification.

torn, punctured, contaminated, or their ability to function as a barrier is compromised.

- Utility gloves may be decontaminated for reuse if their integrity is not compromised. Discard utility gloves when they show signs of cracking, peeling, tearing, puncturing, or deteriorating.
- Never wash or decontaminate disposable gloves for reuse.
- Wear appropriate face and eye protection such as a mask with glasses with solid side shields or a chin-length face shield when splashes, sprays, spatters, or droplets of blood or other potentially infectious materials pose a hazard to the eye, nose, or mouth.
- Wear appropriate protective body coverings such as gowns, aprons, caps, and boots when occupational exposure is anticipated. The type and characteristics will depend upon the task and degree of exposure anticipated.

Housekeeping

Under the standard, each place of employment must be kept clean and sanitary. To do this, the employer must develop and implement a cleaning schedule that includes appropriate methods of decontamination and tasks or procedures to be performed. This written schedule must be based on the location within the facility, the type of surfaces to be cleaned, the type of contamination present, the tasks or procedures to be performed, and their location within the facility.

The employer also must ensure that the following housekeeping procedures are followed:

- Clean and decontaminate all equipment and environmental and work surfaces that have been contaminated with blood or other potentially infectious materials.
- Decontaminate work surfaces with an appropriate disinfectant, after completion of procedures, immediately when overtly contaminated, after any spill of blood or other

potentially infectious materials, and at the end of the work shift when surfaces have become contaminated since the last cleaning.

- Remove and replace protective coverings such as plastic wrap and aluminum foil when contaminated.
- Inspect and decontaminate, on a regular basis, reusable receptacles such as bins, pails, and cans that have a likelihood for becoming contaminated. When contamination is visible, clean and decontaminate receptacles immediately, or as soon as feasible.
- Always use mechanical means such as tongs, forceps, or a brush and a dust pan to pick up contaminated broken glassware; never pick up with hands even if gloves are worn.
- Store or process reusable sharps in a way that ensures safe handling.
- Place other regulated waste* in closable and labeled or color-coded containers. When storing, handling, transporting or shipping, place other regulated waste in containers that are constructed to prevent leakage.
- When discarding contaminated sharps, place them in containers that are closable, puncture-resistant, appropriately labeled or color-coded, and leakproof on the sides and bottom.
- Ensure that sharps containers are easily accessible to personnel and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found. Sharps containers also must be kept upright throughout use, replaced routinely, closed when moved, and not allowed to overfill.

*Liquid or semi-liquid blood or other potentially infectious materials; items contaminated with blood or other potentially infectious materials that would release these substances in a liquid or semi-liquid state if compressed; items caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

- Never manually open, empty, or clean reusable contaminated sharps disposal containers.
- Discard all regulated waste according to federal, state, and local regulations.
- Handle contaminated laundry as little as possible and with a minimum of agitation.
- Use appropriate personal protective equipment when handling contaminated laundry.
- Place wet contaminated laundry in leak-proof, labeled or color-coded containers before transporting.
- Bag contaminated laundry at its location of use.
- Never sort or rinse contaminated laundry in areas of its use.

Labeling

The standard requires that fluorescent orange or orange-red warning labels be attached to containers of regulated waste, to refrigerators and freezers containing blood and other potentially infectious materials, and to other containers used to store, transport, or ship blood or other potentially infectious materials (see Table 2). These labels are not required when (1) red bags or red containers are used, (2) containers of blood, blood components, or blood products are labeled as to their contents and have been released for transfusion or other clinical use, and (3) individual containers of blood or other potentially infectious materials are placed in a labeled container during storage, transport, shipment or disposal. The warning label must be fluorescent orange or orange-red, contain the biohazard symbol and the word BIOHAZARD (see Figure 1), in a contrasting color, and be attached to each object by string, wire, adhesive, or another method to prevent loss or unintentional removal of the label.

As already indicated, the above preventive measures are intended to eliminate or minimize the risks of occupational exposure. In the event that an exposure occurs, however, certain procedures are required.

Table 2. Labeling Requirements

Item	No Label Needed if Universal Precautions Are Used and Specific Use of Container or Item Is Known to All Employees		Biohazard Label	or	Red Container
Regulated waste container (e.g., contaminated sharps containers)			X	or	X
Reusable contaminated sharps container (e.g., surgical instruments soaking in a tray)			X	or	X
Refrigerator/freezer holding blood or other potentially infectious material			X		
Containers used for storage, transport or shipping of blood			X	or	X
Blood/blood products for clinical use	No labels required				
Individual specimen containers of blood or other potentially infectious materials remaining in facility	X	or	X	or	X
Contaminated equipment needing service (e.g., dialysis equipment; suction apparatus)			X plus a label specifying where the contamination exists		
Specimens and regulated waste shipped from the primary facility to another facility for service or disposal			X	or	X
Contaminated laundry		or	X	or	X
Contaminated laundry sent to another facility that does not use Universal Precautions			X	or	X

* Alternative labeling or color coding is sufficient if it permits all employees to recognize the containers as requiring compliance with Universal Precautions



Figure 1. BIOHAZARD Symbol

What to Do If an Exposure Incident Occurs

The standard requires that the post-exposure medical evaluation and followup be made available immediately for employees who have had an exposure incident. At a minimum, the evaluation and followup must, at least, include the following elements:

- Document the routes of exposure and how exposure occurred.
- Identify and document the source individual, unless the employer can establish that identification is infeasible or prohibited by state or local law.
- Obtain consent* and test source individual's blood as soon as possible to determine HIV and HBV infectivity and document the source's blood test results.
- If the source individual is known to be infected with either HIV or HBV, testing need not be repeated to determine the known infectivity.

*If consent is not obtained, the employer must show that legally required consent could not be obtained. Where consent is not required by law, the source individual's blood, if available, should be tested and the results documented.

- Provide the exposed employee with the source individual's test results and information about applicable disclosure laws and regulations concerning the source identity and infectious status.
- After obtaining consent, collect exposed employee's blood as soon as feasible after the exposure incident and test blood for HBV and HIV serological status.
- If the employee does not give consent for HIV serological testing during the collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days.*
- Provide HBV and HIV serological testing, counseling, and safe and effective post-exposure prophylaxis following the current recommendations of the U.S. Public Health Service.

The employer must give the health care professional responsible for the employee's hepatitis B vaccination and post-exposure evaluation and followup a copy of the OSHA standard. The employer also must provide to the health care professional evaluating the employee after an exposure incident a description of the employee's job duties relevant to the exposure incident, documentation of the route(s) of exposure, circumstances of exposure, and results of the source individual's blood tests, if available, and all relevant employee medical records, including vaccination status.

Within 15 days after evaluation of the exposed employee, the employer must provide the employee with a copy of the health care professional's written opinion. The written opinion is limited to whether the vaccine is indicated and if it has been received. The written opinion for post-exposure evaluation must document that the employee has been informed of the results of the medical evaluation and of any medical conditions resulting from the exposure incident that may require further evaluation or treatment. All other diagnoses must remain confidential and not be included in the written report.

The requirements for the medical and training records are discussed in the next section on recordkeeping.

*If, during this time, the exposed employee elects to have the baseline sample tested, testing shall be done as soon as feasible.

Recordkeeping

Employers also must preserve and maintain for each employee an accurate record of occupational exposure according to OSHA's rule governing access to employee exposure and medical records, *Title 29 Code of Federal Regulations, Part 1910.20*.

Under the bloodborne pathogens standard, however, medical records also must include the following information:

- Employee's name and social security number;
- Employee's hepatitis B vaccination status including vaccination dates and any medical records related to the employee's ability to receive vaccinations;
- Results of examinations, medical testing, and post-exposure evaluation and followup procedures;
- Health care professional's written opinion; and
- A copy of the information provided to the health care professional.

Medical records must be kept confidential and maintained for at least the duration of employment plus 30 years.

The bloodborne pathogens standard also requires employers to maintain and to keep accurate training records for 3 years and to include the following:

- Training dates,
- Content or a summary of the training,
- Names and qualifications of trainer(s), and
- Names and job titles of trainees.

Upon request, both medical and training records must be made available to the Director of the National Institute for Occupational Safety and Health (NIOSH) and to the Assistant Secretary of Labor

for Occupational Safety and Health. Training records must be available to employees or employee representatives upon request. An employee's medical records can be obtained by that employee or anyone having that employee's written consent. Also, if the employer ceases to do business, medical and training records must be transferred to the successor employer. If there is no successor employer, the employer must notify the Director, NIOSH, U.S. Department of Health and Human Services, for specific directions regarding disposition of the records at least 3 months prior to intended disposal.

HIV and HBV Research Laboratories and Production Facilities

In addition to other requirements of the standard, employers in research laboratories and production facilities engaged in the culture, production, concentration, experimentation, and manipulation of HIV and HBV,* must ensure the following:

- Provide HIV and HBV **research laboratories** with a facility for hand-and-eye washing and an autoclave for decontaminating regulated waste.
- Provide HIV and HBV **production facilities** with work areas separated from unrestricted areas (corridors or other contiguous areas) within the building by two sets of self-closing access doors; with a ducted exhaust-air ventilation system; an autoclave near the work area for decontamination; a sink for hand washing that is foot, elbow, or automatically operated and is near the exit door; eye wash facility; and water-resistant, sealable surfaces of walls, floors, and ceilings.
- Decontaminate, autoclave, or incinerate all regulated waste before disposal.
- Keep doors closed when work involves HIV and HBV.
- Place contaminated materials in durable, leak-proof.

*This does not apply to clinical or diagnostic laboratories

appropriately labeled or color-coded, closed containers before removing them from the work area.

- Permit only authorized personnel in work areas and in animal rooms.
- Place proper hazard warning signs, incorporating the biohazard symbol, on access doors when potentially infectious materials or infected animals are present in the work areas (see Figure 2).
- Do not work with potentially infectious materials on an open bench. Use biological safety cabinets or other physical-containment devices.
- Install only certified biological safety cabinets and certify them annually thereafter or when moving them to another location within the facility.
- Wear appropriate personal protective equipment such as coats, gowns, smocks, and uniforms only in work areas and in animal rooms when handling other potentially infectious materials; and decontaminate clothing before laundering.
- Protect vacuum lines with high-efficiency particulate air filters and liquid disinfectant traps. Check routinely and maintain or replace, as necessary.
- Use needle-locking syringes or disposable syringe-needle units when injecting or aspirating potentially infectious fluids.
- Use hypodermic needles and syringes for parenteral injections and aspirations of fluids from laboratory animals and diaphragm bottles.
- Never bend, shear, replace in the sheath guard, or remove a used needle from the syringe following use.
- Use extreme caution when handling needles and syringes. Also, place used needles and syringes in a puncture-resistant container and decontaminate or autoclave before reuse, or disposal.

-
- Report all spills and accidents to the laboratory director immediately.
 - Adopt a biosafety manual and periodically review and update it. Also, advise and require employees to read, follow, and practice the instructions.
 - Use appropriate protective clothing or respirators when exposed to droplets, splashes, spills, or aerosols.
 - Provide additional initial training on standard microbiological techniques and practices specific to the facility and the handling of human pathogens or tissue cultures to employees without previous experience and allow only employees with demonstrated experience and proficiency to work in these facilities.

Other Sources of OSHA Assistance

Consultation Programs

Consultation assistance is available to employers who want help in establishing and maintaining a safe and healthful workplace. Largely funded by OSHA, the service is provided at no cost to the employer. Primarily developed for smaller employers with more hazardous operations, the consultation service is delivered by state government agencies or universities employing professional safety consultants and health consultants. Comprehensive assistance includes an appraisal of all mechanical, physical work practice, and environmental hazards of the workplace and all aspects of the employer's present job safety and health program. No penalties are proposed or citations issued for hazards identified by the consultant.

For more information concerning consultation assistance, see the list of consultation projects listed at the end of this publication (see Appendix B).

Voluntary Protection Programs

Voluntary protection programs (VPP) and onsite consultation services, when coupled with an effective enforcement program,



BIOHAZARD

(Name of the infectious agent)

(Special requirements for entering the area)

(Name, telephone number of the laboratory director
or other responsible person.)

Figure 2. Sign for HIV/HBV Production Facilities

expand worker protection to help meet the goals of the OSH Act. The three VPPs—Star, Merit, and Demonstration—are designed to recognize outstanding achievement by companies that have successfully incorporated comprehensive safety and health programs into their total management system. They motivate others to achieve excellent safety and health results in the same outstanding way and they establish a cooperative relationship among employers, employees, and OSHA.

For additional information on VPPs and how to apply, contact the OSHA national, regional, or area offices listed at the end of this publication.

Training and Education

OSHA's Training Institute in Des Plaines, IL, provides basic and advanced courses in safety and health for federal and state compliance officers, state consultants, federal agency personnel, and private sector employers, employees, and their representatives.

OSHA also provides funds to nonprofit organizations, through grants, to conduct workplace training and education in subjects where OSHA believes there is a lack of workplace training. Current grant subjects include agricultural safety and health, hazard communication programs, and HIV and HBV. Grants are awarded annually, with a 1-year renewal possible. Grant recipients are expected to contribute 20 percent of the total grant cost.

For more information on grants, and training and education, contact the OSHA Training Institute, Office of Training and Education, 1555 Times Drive, Des Plaines, IL 60018, (708) 297-4810.

Finally, OSHA's area offices offer a variety of informational services, such as publications, audiovisual aids, technical advice, and speakers for special engagements. Each regional office has a bloodborne pathogens coordinator to assist employers.

Appendix A

The following statement of declination of hepatitis B vaccination must be signed by an employee who chooses **not to accept** the vaccine. The statement can only be signed by the employee following appropriate training regarding hepatitis B, hepatitis B vaccination, the efficacy, safety, method of administration, and benefits of vaccination, and that the vaccine and vaccination are provided free of charge to the employee. The statement is not a waiver; employees can request and receive the hepatitis B vaccination at a later date if they remain occupationally at risk for hepatitis B.

Declination Statement

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Employee Signature

Date

Appendix B

OSHA Consultation Project Directory

Consultation programs provide free services to employers who request help in identifying and correcting specific hazards, want to improve their safety and health programs, and/or need further assistance in training and education. Funded by OSHA and delivered by well-trained professional staff of state governments, consultation services are comprehensive, and include an appraisal of all workplace hazards, practices, and job safety and health programs; conferences and agreements with management; assistance in implementing recommendations; and a followup appraisal to ensure that any required corrections are made. For more information on consultation programs, contact the appropriate office in your state listed below.

State	Telephone
Alabama	(205) 348-3033
Alaska	(907) 264-2599
Arizona	(602) 255-5795
Arkansas	(501) 682-4522
California	(415) 737-2843
Colorado	(303) 491-6151
Connecticut	(203) 566-4550
Delaware	(302) 577-3908
District of Columbia	(202) 576-6339
Florida	(904) 488-3044
Georgia	(404) 894-8274
Guam	(671) 646-9244
Hawaii	(808) 548-4155
Idaho	(208) 385-3283
Illinois	(312) 814-2339
Indiana	(317) 232-2688
Iowa	(515) 281-5352
Kansas	(913) 296-4386
Kentucky	(502) 564-6895
Louisiana	(504) 342-9601
Maine	(207) 289-6460
Maryland	(301) 333-4218
Massachusetts	(617) 727-3463

Michigan.....	(517) 335-8250(H)
.....	(517) 322-1809(S)
Minnesota	(612) 297-2393
Mississippi.....	(601) 987-3981
Missouri.....	(314) 751-3403
Montana.....	(406) 444-6401
Nebraska.....	(402) 471-4717
Nevada.....	(702) 688-1474
New Hampshire	(603) 271-3170
New Jersey	(609) 292-0404
New Mexico	(505) 827-2885
New York	(518) 457-2481
North Carolina.....	(919) 733-3949
North Dakota.....	(701) 221-5188
Ohio	(614) 644-2631
Oklahoma.....	(405) 528-1500
Oregon.....	(503) 378-3272
Pennsylvania.....	(800) 382-1241
.....	(Toll free in State)
.....	(412) 357-2561
Puerto Rico	(809) 754-2171
Rhode Island.....	(401) 277-2438
South Carolina	(803) 734-9599
South Dakota	(605) 688-4101
Tennessee	(615) 741-7036
Texas	(512) 440-3834
Utah	(801) 530-6868
Vermont	(802) 828-2765
Virginia	(804) 786-6613
Virgin Islands.....	(809) 772-1315
Washington.....	(206) 586-0963
West Virginia.....	(304) 348-7890
Wisconsin.....	(608) 266-8579(H)
.....	(414) 521-5063(S)
Wyoming.....	(307) 777-7786
H-Health S-Safety	

States with Approved Plans

Commissioner

Alaska Department of Labor
P.O. Box 21149
Juneau, AK 99801
(907) 465-2700

Director

Industrial Commission
of Arizona
800 W. Washington
Phoenix, AZ 85007
(602) 542-5795

Director

California Department of
Industrial Relations
455 Golden Gate Avenue
4th Floor
S. San Francisco, CA 94102
(415) 703-4590

Commissioner

Connecticut Department
of Labor
200 Folly Brook Boulevard
Wethersfield, CT 06109
(203) 566-5123

Director

Hawaii Department of Labor
and Industrial Relations
830 Punchbowl Street
Honolulu, HI 96813
(808) 548-3150

Commissioner

Indiana Department of Labor
1013 State Office Building
100 North Senate Avenue
Indianapolis, IN 46204-2287
(317) 232-2665

Commissioner

Iowa Division of Labor Services
1000 E. Grand Avenue
Des Moines, IA 50319
(515) 281-3447

Acting Commissioner

for Workplace Standards
Kentucky Labor Cabinet
1049 U.S. Highway, 127 South
Frankfort, KY 40601
(502) 564-3070

Commissioner

Maryland Division of Labor
and Industry
Department of Licensing
and Regulation
501 St. Paul Place, 2nd Floor
Baltimore, MD 21202-2272
(301) 333-4179

Director

Michigan Department of Labor
Victor Office Center
201 N. Washington Square
P.O. Box 30015
Lansing, MI 48933
(517) 373-9600

Director

Michigan Department of
Public Health
3423 North Logan Street
Box 30195
Lansing, MI 48909
(517) 335-8022

Commissioner

Minnesota Department of Labor
and Industry
443 Lafayette Road
St. Paul, MN 55155
(612) 296-2342

Director

Nevada Department of
Industrial Relations
Division of Occupational Safety
and Health
Capitol Complex
1370 S. Curry Street
Carson City, NV 89710
(702) 687-3032

Secretary

New Mexico Environment Dept.
Occupational Health and
Safety Bureau
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, NM 87502
(505) 827-2850

Commissioner

New York Department of Labor
State Office Building
Campus 12-Room 457
Albany, NY 12240
(518) 457-2741

Commissioner

North Carolina Department
of Labor
4 West Edenton Street
Raleigh, NC 27601
(919) 733-7166

Administrator

Oregon Occupational Safety
and Health Division
Oregon Department of
Insurance and Finance,
Room 160
Labor and Industries Building
Salem, OR 97310
(503) 378-3272

Secretary

Puerto Rico Department of
Labor and Human Resources
Prudencio Rivera
Martinez Building
505 Munoz Rivera Avenue
Hato Rey, PR 00918
(809) 754-2119

Commissioner

South Carolina Department
of Labor
3600 Forest Drive
P.O. Box 11329
Columbia, SC 29211-1329
(803) 734-9594

Commissioner

Tennessee Department
of Labor
501 Union Building
Suite "A", 2nd Floor
Nashville, TN 37243-0655
(615) 741-2582

Administrator

Utah Occupational Safety
and Health
160 East 300 South
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Salt Lake City, UT 84110-5800
(801) 530-6900

Commissioner

Vermont Department of Labor
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120 State Street
Montpelier, VT 05620
(802) 828-2765

Commissioner

Virgin Islands Department
of Labor
2131 Hospital Street
Box 890
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St. Croix, VI 00840-4666
(809) 773-1994

Commissioner

Virginia Department of Labor
and Industry
Powers-Taylor Building
13 S. 13th Street
Richmond, VA 23219
(804) 786-2376

Director

Washington Department of
Labor and Industries
General Administration
Building
Room 334-AX-31
Olympia, WA 98504-0631
(206) 753-6307

Director

Department of Employment
Division of Employment Affairs
Occupational Safety and
Health Administration
Herschler Building
2nd Floor East
122 West 25th Street
Cheyenne, WY 82002
(307) 777-7786 or 777-7787

Related Publications

A single free copy of the following materials may be obtained from OSHA field offices or the OSHA Publications Office, 200 Constitution Avenue, N.W., Room N3101, Washington, D.C. 20210, (202) 523-9667. Please send a self-addressed label with the request.

OSHA 2056 — All About OSHA

OSHA 3021 — Employee Workplace Rights

OSHA 3047 — Consultation Services for the Employer

OSHA 3077 — Personal Protective Equipment

OSHA 3084 — Chemical Hazard Communication

OSHA 3088 — How to Prepare for Workplace Emergencies

OSHA 3110 — Access to Medical and Exposure Records

**OSHA 3128 — Bloodborne Pathogens and Acute Health
Care Workers**

OSHA 3129 — Bloodborne Pathogens and Dental Workers

**OSHA 3130 — Bloodborne Pathogens and
Emergency Responders**

**OSHA 3131 — Bloodborne Pathogens and Long-Term Health
Care Workers**

Also, copies of the following OSHA materials may be obtained from the U.S. Government Printing Office (GPO), Washington, D. C. 20402, (202) 783-3238.

When ordering publications from the Government Printing Office, include GPO order numbers and make checks payable to the Superintendent of Documents. GPO gives a 25-percent discount for orders of 100 or more copies. Credit card charge (MasterCard and Visa) is accepted.

All prices subject to change by GPO.

Chemical Hazard Communication Guidelines (OSHA 3111)
Order No. 029-016-00127-1. Cost: \$1.00

Ergonomics: The Study of Work (OSHA 3125)
Order No. 029-016-00124-7. Cost: \$1.00

Occupational Exposure to Bloodborne Pathogens, *Federal Register* 56(235): 64004 - 64182, December 6, 1991
Order No. 069-001-00040-8. Cost: \$2.00

**U.S. Department of Labor
Occupational Safety and Health Administration
Regional Offices**

Region I

(CT,* MA, ME, NH, RI, VT*)
133 Portland Street
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Telephone: (617) 565-7164

Region II

(NJ, NY,* PR,* VI*)
201 Varick Street
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Region III

(DC, DE, MD,* PA, VA,* WV)
Gateway Building, Suite 2100
3535 Market Street
Philadelphia, PA 19104
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Region IV

(AL, FL, GA, KY,* MS, NC,*
SC,* TN*)
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Region VIII

(CO, MT, ND, SD, UT,* WY*)
Federal Building, Room 1576
1961 Stout Street
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Telephone: (303) 844-3061

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(American Samoa, AZ,* CA,*
Guam, HI,* NV,* Trust
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(AK,* ID, OR,* WA*)
1111 Third Avenue
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*These states and territories operate their own OSHA-approved job safety and health programs (Connecticut and New York plans cover public employees only). States with approved programs must have a standard that is identical to, or at least as effective as, the federal standard.